REMARKS

This Response is submitted in reply to the final Office Action mailed on March 18, 2008. No fee is due in connection with this Response. The Director is authorized to charge any fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 117682-11 on the account statement.

Claims 1 and 3-19 are pending in this application. Claim 2 was previously canceled. Claim 19 is withdrawn. In the Office Action, Claims 1 and 3-18 are rejected under 35 U.S.C. §103. For at least the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claims 1 and 3-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,115,000 to Jane et al. ("*Jane*") in view of U.S. Patent No. 5,510,401 to Dehennau et al. ("*Dehennau*") and in further view of U.S. Patent No. 6,242,503 to Kozma et al. ("*Kozma*"). Claims 1 and 3-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Dehennau* in view of U.S. Patent No. 6,231,970 to Andersen et al. ("*Andersen*") and in view of *Kozma* and further in view of U.S. Patent No. 5,496,895 to Chinnaswamy et al. ("*Chinnaswamy*"). Claim 18 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Dehennau* in view of *Andersen* and in view of *Kozma* and further in view of *Chinnaswamy* and U.S. Patent No. 5,216,075 to Papazoglou et al. ("*Papazoglou*"). Applicants believe these rejections are improper and respectfully traverse them for at least the reasons set forth below.

Independent Claims 1, 10 and 17, recite, in part, a synthetic polymer and starch blend comprising 1-30 wt.% of an unplasticized starch having a moisture content of less than about 1%. An advantage of the claimed synthetic polymer and starch blend is that the starch is unplasticized (e.g. lacks a plasticizer) and has a moisture content of less than about 1%. In existing starch/polymer blends, a plasticizer is utilized to facilitate blending of the starch and polymer. However, this can have an adverse effect of increasing water absorbency of the blend. By eliminating the need for a plasticizer, for example, by replacing it with a compatibilizer in accordance with the claimed blend, the water absorbency of the final polymer and starch blend can be reduced. Moreover, the low moisture content of the starch ensures that very little moisture is in the polymer and starch blend to begin with. The absence of the plasticizer and the

low moisture content of the starch provides for a stronger, more durable product made from the polymer/starch blend. In contrast, Applicants respectfully submit that the cited references are deficient with respect to the present claims.

Jane fails to disclose or suggest a synthetic polymer and starch blend comprising 1-30 wt.% of an unplasticized starch having a moisture content of less than about 1% as required by independent Claims 1, 10 and 17. *Jane* is directed to starch plastics that incorporate modified polyethylene. At no point does *Jane* teach using a starch that has a moisture content of less than about 1% or drying a starch to give a moisture content of less than about 1%. The Patent Office admits same. See Office Action, page 4.

The Patent Office alleges that *Jane* must inherently disclose a starch having a moisture content of less than about 1% because *Jane* teaches heating the components of his starch-based product at 110 °C to 200 °C. Applicants respectfully disagree with the Patent Office's inherency argument that *Jane* inherently discloses a starch having a moisture content of less than about 1% based solely on the blended components being heated.

As shown in Chapter 4 of the publication Technology of Corn Wet Milling and Associated Process (submitted in the response dated December, 2007), starch typically has a moisture content of 12%. It takes a great deal of time and energy to reduce the moisture content of starch to less than about 1%. For example, as described in Examples 1-2, Applicants dried cornstarch at 120 °C for 24 hours to reach a moisture content of less than 1% prior to the blending.

Jane teaches heating the components of his starch-based product at 110 °C to 200 °C. Nevertheless, *Jane* does not teach or suggest using the high temperature blending to remove moisture from the starch. For example, the starch is already combined with other components while being blended at this temperature, which can prevent substantial moisture from being removed from the starch component. Moreover, *Jane* does not provide any time or duration for blending the starch-based product at this temperature. In fact, *Jane* teaches that the time for heating and blending to occur is not critical to the process. See *Jane*, column 4, lines 22-23. As a result, *Jane* is not interested in utilizing a starch having a moisture content of less than about 1% in accordance with the present claims.

To satisfy the test for inherency, heating the components of *Jane's* starch-based product at 110 °C to 200 °C to evaporate water from the product would necessarily (i.e. always or

automatically) reduce the moisture content of the starch to less than about 1%. That condition simply is not met under the present circumstances. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. See, MPEP 2112. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art). Consequently, the Patent Office has failed to provide a basis in fact or technical reasoning to support the determination that the allegedly inherent characteristic of a starch having a moisture content of less than about 1% necessarily flows from the teachings of *Jane*.

Dehennau and *Kozma* fail to remedy the deficiencies of *Jane*. For example, *Dehennau* and *Kozma* fail to disclose or suggest a synthetic polymer and starch blend comprising 1-30 wt.% of an unplasticized starch having a moisture content of less than about 1% as required by independent Claims 1, 10 and 17. *Dehennau* disclosing using plasticized starch, which teaches away from the present claims. See *Dehennau*, column 3, lines 10-65. *Kozma* fails to even disclose or suggest the use of starch in his polymer articles.

Finally, *Andersen* and *Chinnaswamy* also fail to disclose or suggest a synthetic polymer and starch blend comprising 1-30 wt.% of an unplasticized starch having a moisture content of less than about 1% as required by independent Claims 1, 10 and 17. *Andersen* is entirely directed to a plasticized starch (i.e. the "starch melt"), which not only fails to disclose the present claims but actually teaches away from same. See *Andersen*, column 11, lines 35-39. *Chinnaswamy* fails to disclose or suggest using any starch that has a moisture content of less than about 1% or drying a starch to give a moisture content of less than about 1%.

For at least the reasons discussed above, even if combinable, the cited references do not teach, suggest, or even disclose all of the elements of independent Claims 1, 10 and 17, along with dependent Claim 3-9, 11-16 and 18 that depend from Claims 1, 10 and 17. As a result, the cited references fail to render the claimed subject matter obvious.

Accordingly, Applicants respectfully request that the obviousness rejections with respect to Claims 1 and 3-18 be reconsidered and the rejections be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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